

Official

121002  
3/1/03

72

**IN THE CLAIMS**

Please amend claims 1, 3, 9, 11, 17, 19, 25, 26, 32, and 38 as follows.

Claims 2, 4-8, 10, 12-16, 18, 20-24, 27-31, 33-37, and 39-43 are re-presented.

**CLEAN VERSION OF PENDING CLAIMS**

- Sub  
#1
- D1
1. (Amended Once) A method comprising:  
identifying where at least two digital images overlap at a first resolution level;  
purging memory of the at least two digital images at the first resolution level;  
dividing each of the at least two digital images into a plurality of areas at a second  
resolution level higher than the first resolution level; and  
identifying where overlapping ones of the areas at the second resolution level overlap.
  2. The method of claim 1, wherein each of the at least two digital images are stored at the  
first and second resolution levels.
  3. (Amended Once) The method of claim 1, wherein the method comprises:  
storing the at least two digital images at the first resolution level in memory to identify  
where the at least two digital images overlap at the first resolution level; and  
storing the overlapping areas at the second resolution level in the memory to identify  
where the overlapping areas at the second resolution level overlap.
- D2

4. The method of claim 1, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique.

5. The method of claim 1, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap; and  
wherein the identifying where overlapping ones of the areas at the second resolution level overlap comprises identifying the overlapping areas based on the identified coordinates.

6. The method of claim 1, comprising:  
combining the at least two digital images.

7. The method of claim 1, comprising:  
identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.

8. The method of claim 1, comprising:  
identifying where another set of at least two digital images overlap at the first resolution level;  
dividing each image of the other set of at least two digital images into a plurality of areas at the second resolution level;

F1  
Cont

identifying where overlapping ones of the areas of the other set of at least two digital images at the second resolution level overlap; and  
combining the digital images.

D3

9. (Amended Once) A computer readable medium having instructions that, when executed by a computer, perform a method comprising:

identifying where at least two digital images overlap at a first resolution level;  
purging memory of the at least two digital images at the first resolution level;  
dividing each of the at least two digital images into a plurality of areas at a second resolution level higher than the first resolution level; and  
identifying where overlapping ones of the areas at the second resolution level overlap.

10. The computer readable medium of claim 9, wherein each of the at least two digital images are stored at the first and second resolution levels.

D4

11. (Amended Once) The computer readable medium of claim 9, wherein the method comprises:

storing the at least two digital images at the first resolution level in memory to identify where the at least two digital images overlap at the first resolution level; and  
storing the overlapping areas at the second resolution level in the memory to identify where the overlapping areas at the second resolution level overlap.

71  
Cont

12. The computer readable medium of claim 9, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique.

13. The computer readable medium of claim 9, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap; and

wherein the identifying where overlapping ones of the areas at the second resolution level overlap comprises identifying the overlapping areas based on the identified coordinates.

14. The computer readable medium of claim 9, wherein the method comprises combining the at least two digital images.

15. The computer readable medium of claim 9, wherein the method comprises identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.

16. The computer readable medium of claim 9, wherein the method comprises:  
identifying where another set of at least two digital images overlap at the first resolution level;  
dividing each image of the other set of at least two digital images into a plurality of areas at the second resolution level;

F7  
cont

identifying where overlapping ones of the areas of the other set of at least two digital images at the second resolution level overlap; and  
combining the digital images.

---

17. (Amended Once) A computer system comprising:

- (a) one or more processors; and  
(b) a computer readable medium to store instructions that, when executed by the one or more processors, perform:

- D5
- (i) identifying where at least two digital images overlap at a first resolution level,  
(ii) purging memory of the at least two digital images at the first resolution level;  
(iii) dividing each of the at least two digital images into a plurality of areas at a second resolution level higher than the first resolution level, and  
(iv) identifying where overlapping ones of the areas at the second resolution level overlap.
- 

18. The computer system of claim 17, comprising a computer readable medium to store each of the at least two digital images at the first and second resolution levels.

---

D6

19. (Amended Once) The computer system of claim 17, comprising memory, the computer readable medium to store instructions that, when executed by the one or more processors,

perform:

storing the at least two digital images at the first resolution level in the memory to  
identify where the at least two digital images overlap at the first resolution level, and  
storing the overlapping areas at the second resolution level in the memory to identify  
where the overlapping areas at the second resolution level overlap.

20. The computer system of claim 17, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique.

21. The computer system of claim 17, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap; and

wherein the identifying where overlapping ones of the areas at the second resolution level overlap comprises identifying the overlapping areas based on the identified coordinates.

22. The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform combining the at least two digital images.

23. The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform identifying where the at least two

digital images overlap at one or more resolution levels higher than the second resolution level.

24. The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform:

identifying where another set of at least two digital images overlap at the first resolution level,

dividing each image of the other set of at least two digital images into a plurality of areas at the second resolution level,

identifying where overlapping ones of the areas of the other set of at least two digital images at the second resolution level overlap, and

combining the digital images.

25. (Amended Once) A computer system comprising:

means for identifying where at least two digital images overlap at a first resolution level;

means for purging memory of the at least two digital images at the first resolution level;

means for dividing each of the at least two digital images into a plurality of areas at a second resolution level higher than the first resolution level; and

means for identifying where overlapping ones of the areas at the second resolution level overlap.

26. (Amended Once) The computer system of claim 25, comprising:

means for storing the at least two digital images at the first resolution level in memory to

D7  
concl

identify where the at least two digital images overlap at the first resolution level; and  
means for storing the overlapping areas at the second resolution level in the memory to  
identify where the overlapping areas at the second resolution level overlap.

FH  
amt

27. The computer system of claim 25, comprising:  
means for combining the at least two digital images.

DB

28. The method of claim 1, wherein the dividing comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.

29. The computer readable medium of claim 9, wherein the dividing comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.

30. The computer system of claim 17, wherein the dividing comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.

31. The computer system of claim 25, wherein the dividing means comprises means for dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.



32. (Amended Once) A method comprising:

identifying where at least two digital images overlap at a first resolution level;

purging memory of the at least two digital images at the first resolution level;

dividing each of the at least two digital images into a plurality of areas at a second resolution level higher than the first resolution level;

identifying overlapping ones of the areas at the second resolution level based on where the at least two digital images overlap at the first resolution level;

identifying where the overlapping ones of the areas at the second resolution level overlap;

purging memory of the at least two digital images at the second resolution level;

dividing each of the at least two digital images into a plurality of areas at a third resolution level higher than the second resolution level;

identifying overlapping ones of the areas at the third resolution level based on where the overlapping ones of the areas at the second resolution level overlap;

identifying where the overlapping ones of the areas at the third resolution level overlap;

and

combining the at least two digital images.

33. The method of claim 32, wherein the dividing each of the at least two digital images into a plurality of areas at the second resolution level comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size; and

wherein the dividing each of the at least two digital images into a plurality of areas at the third resolution level comprises dividing each of the at least two digital images at the third resolution level into a plurality of tiles each having a size less than the threshold size.

34. The method of claim 32, wherein each of the at least two digital images are stored at the first, second, and third resolution levels.

35. The method of claim 32, wherein the method comprises:  
storing the at least two digital images at the first resolution level in memory to identify where the at least two digital images overlap at the first resolution level;  
purging the memory of the at least two digital images at the first resolution level;  
storing the overlapping areas at the second resolution level in the memory to identify where the overlapping areas at the second resolution level overlap;  
purging the memory of the overlapping areas at the second resolution level; and  
storing the overlapping areas at the third resolution level in the memory to identify where the overlapping areas at the third resolution level overlap.

36. The method of claim 32, wherein the identifying where the at least two digital images overlap at the first resolution level, the identifying where overlapping ones of the areas at the second resolution level overlap, and the identifying where overlapping ones of the areas at the third resolution level overlap each comprise using an edge detection technique.

37. The method of claim 32, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap;

wherein the identifying overlapping ones of the areas at the second resolution level comprises identifying the overlapping areas at the second resolution level based on the identified coordinates where the at least two digital images at the first resolution level overlap;

wherein the identifying where the overlapping ones of the areas at the second resolution level overlap comprises identifying coordinates where the overlapping ones of the areas at the second resolution level overlap; and

wherein the identifying overlapping ones of the areas at the third resolution level comprises identifying the overlapping areas at the third resolution level based on the identified coordinates where the overlapping ones of the areas at the second resolution level overlap.

38. (Amended Once) A computer readable medium having instructions that, when executed by a computer, perform a method comprising:

identifying where at least two digital images overlap at a first resolution level;

purging memory of the at least two digital images at the first resolution level;

dividing each of the at least two digital images into a plurality of areas at a second resolution level higher than the first resolution level;

identifying overlapping ones of the areas at the second resolution level based on where the at least two digital images overlap at the first resolution level;

identifying where the overlapping ones of the areas at the second resolution level overlap;

*D10*  
*cancel*

purging memory of the at least two digital images at the second resolution level;  
dividing each of the at least two digital images into a plurality of areas at a third  
resolution level higher than the second resolution level;  
identifying overlapping ones of the areas at the third resolution level based on where the  
overlapping ones of the areas at the second resolution level overlap;  
identifying where the overlapping ones of the areas at the third resolution level overlap;  
and  
combining the at least two digital images.

---

39. The computer readable medium of claim 38, wherein the dividing each of the at least two digital images into a plurality of areas at the second resolution level comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size; and

wherein the dividing each of the at least two digital images into a plurality of areas at the third resolution level comprises dividing each of the at least two digital images at the third resolution level into a plurality of tiles each having a size less than the threshold size.

40. The computer readable medium of claim 38, wherein each of the at least two digital images are stored at the first, second, and third resolution levels.

41. The computer readable medium of claim 38, wherein the method comprises:  
storing the at least two digital images at the first resolution level in memory to identify

where the at least two digital images overlap at the first resolution level;

purging the memory of the at least two digital images at the first resolution level;

storing the overlapping areas at the second resolution level in the memory to identify

where the overlapping areas at the second resolution level overlap;

purging the memory of the overlapping areas at the second resolution level; and

storing the overlapping areas at the third resolution level in the memory to identify where the overlapping areas at the third resolution level overlap.

42. The computer readable medium of claim 38, wherein the identifying where the at least two digital images overlap at the first resolution level, the identifying where overlapping ones of the areas at the second resolution level overlap, and the identifying where overlapping ones of the areas at the third resolution level overlap each comprise using an edge detection technique.

43. The computer readable medium of claim 38, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap;

wherein the identifying overlapping ones of the areas at the second resolution level comprises identifying the overlapping areas at the second resolution level based on the identified coordinates where the at least two digital images at the first resolution level overlap;

wherein the identifying where the overlapping ones of the areas at the second resolution level overlap comprises identifying coordinates where the overlapping ones of the areas at the second resolution level overlap; and

wherein the identifying overlapping ones of the areas at the third resolution level comprises identifying the overlapping areas at the third resolution level based on the identified coordinates where the overlapping ones of the areas at the second resolution level overlap.